User's Manual

HD6400 Series Video Wall Controller

Contents

Care and Handling of 9X Media Hardware

As with any computer or electronic component our systems are very fragile and can be damaged by mishandling, heat or cold exposure and misuse.

- **PCs/Controllers** – These are high end video servers with very fragile components, therefore extreme caution should be used when transporting, storing or setting up. The following is a list of things that can and will damage the system:
    - o Dropping the system or any type of impact to the server.
    - o Items falling on the server.
    - o Liquids getting on or into the server.
    - o Improper ventilation. These systems must be located in a place with proper ventilation.
    - o Dirt and dust. These systems must also be located in a place that is clean.
    - o Misuse. Using this system in a way that it was not designed for could potentially cause the system to malfunction.
    - ✓ All 9X Media Video Wall controllers must be team-lifted.

- **Displays** – The 9X Media displays are extremely fragile, the most fragile being the LCD screen itself. Extreme caution should be used when handling these components. Our LCD displays have various bezel sizes which are very thin; this only increases the risk of damage from mishandling. The following is a list of things that can and will cause damage to the display:
    - o Dropping or any type of impact to the display.
    - o Hitting the screen. Any object that rubs up or hits the screen of the display can potentially scratch or damage the display screen.
    - o Liquids getting on or into the display.
    - o Extreme heat or poor ventilation.
    - ✓ All 9X Media Displays 32" and above must be team-lifted.

Temperature conditions

- **9X Media LCD Displays**.
    - o Ambient Operating temp   10 to 30 degrees Celsius
    - o Ambient Storage temp   10 to 65 degrees Celsius
- **PCs/Controllers:**
    - o Video I/O Board temp   Max. of 60 degrees Celsius
    - o CPU Operating temp   Max. of 70 degrees Celsius
    - o Ambient Storage temp   10 to 65 degrees Celsius
    - o Ambient Operating temp   Max. of 26 degrees Celsius

Note: Any equipment that has been exposed or stored in cold or below freezing temperatures must be allowed at minimum 12 hours to be brought to room temperature before powering on. Quickly raised temperatures can cause condensation on electronic components that may lead to failure of the device.

Safety Instructions

To prevent damage to your 9X Media system or injury to personnel operating the equipment, please read the following safety precautions prior to operation. These instructions should be made available to all those who will use and operate 9X Media products.

Power

Proper power provisions should be in place for all 9X Media hardware. 9X Media Video Wall Controller systems will require more power than standard PC systems, therefore you should not plug these systems into heavily populated circuits or surge strips. All power supplies must be powered off and disconnected before moving, installing new hardware, or maintenance of the systems internal components.

Cables

Do not expose cables or connectors to liquids, extreme heat, or sharp objects/corners. This could cause short circuiting or electrical damage to the system. Reduce extreme bends on cables; bending cables beyond 90° may cause internal wire damage and loss of video quality. Large quantities of cables may become extremely heavy. Ensure that cables trays and conduit are properly supported.

Ventilation

All computer equipment should be located in a cool & well ventilated environment free from dust, moisture, and extreme changes in temperature. All air intakes and exhaust should be kept clear from obstructions and should be able to freely move air through the system. If the above is not met the system may suffer from overheating and possible equipment damage.

Maintenance

Maintenance should only be carried out by experienced technicians. Maintaining of systems should be done while in a powered-off state and should be done in a safe and proper manor. System should be free of dust and debris that may interfere with fans, filters, and electronic components.

Product Returns

Product returns or RMA's made to 9X Media must receive an RMA number in order to be accepted and processed. Any equipment being returned to 9X Media *MUST* be properly packaged in order for repairs to be completed under the 9X Media limited warranty. This includes 9X Media Video Wall Controllers and Displays. For details or instructions on packaging equipment for return please contact 9X Media Technical Support.

Unpacking your 9X Media hardware

The contents of the box with your new system should contain the following items:

- 9X Media HD6400 Video Wall Controller
- Mouse & Keyboard kit
- Power Cable(s)
- Molex LFH60 Display Dongles (VGA or DVI)
- 9X Media VWS Activation Dongle
- Sliding Rack-Mount Rails for Server Chassis
- Bag of parts for Server Chassis
- 9X Media Software DVD
- Product and Warranty Documentation

Check the packing list shipped along with each system to ensure all items have been received. Additional components will be shipped depending on system configuration. Contact 9X Media Technical Support with any concerns regarding package contents.

➢ *Note!*

When shipped, the 9X Media HD6400 may contain transit packaging INSIDE of the system, this must be removed prior to operation. 9X Media understands that mishandling may occur while in transit and takes extra precaution to ensure each system is received in good condition. To remove the internal packaging, remove the lid that is retained by (4) screws total located on the rear and sides of the chassis.

A notification will be placed on systems containing transit packaging.

Any damages sustained during transit must be reported to 9X Media. Inspect each system for physical and internal damages prior to operation. Using a system that may contain loose hardware may lead to damage. 9X Media will work to facilitate the repair of any system that has been damages as soon as possible. Contact 9X Media Technical Support for any concerns regarding transit damages, repairs, or replacements.

Preferred Carriers

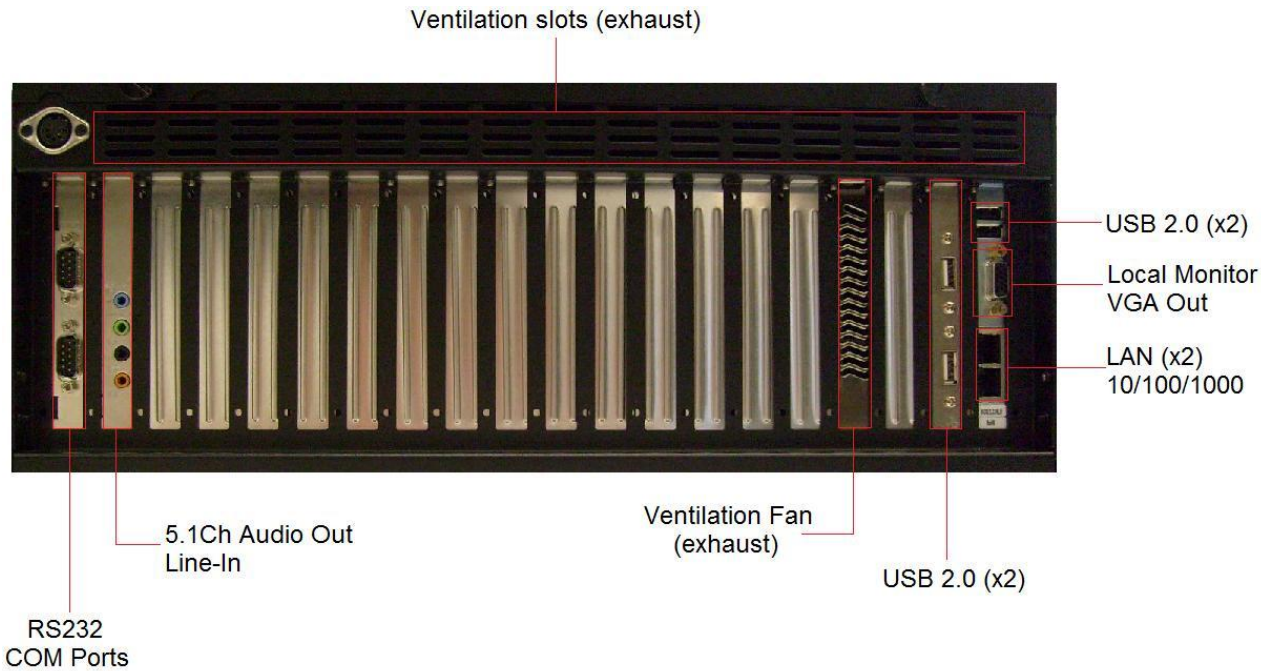|		
Federal Express	www.fedex.com	1-800-463-3339
United Parcel Service	www.ups.com	1-800-742-5877

Front and Rear Views

Status LED's

DVD+-RW Drive

Power Button

Reset Button

Ventilation slots (exhaust)

USB 2.0 (x2)

Local Monitor
VGA Out

LAN (x2)
10/100/1000

5.1Ch Audio Out
Line-In

Ventilation Fan
(exhaust)

USB 2.0 (x2)

RS232
COM Ports

Specifications

Processor:	Quad-Core Intel® Xeon® 2.3Ghz CPU
System Bus:	1333 MHz Front Side Bus
Memory:	2GB 667 MHz DDR2 Fully-Buffered DIMM
Storage:	320GB up to 1TB Hard Drive Storage
	DVD+-RW Drive
Audio:	PCI High-Definition 5.1 Surround Audio
Video:	ATI Onboard 16MB Graphics (1280x1024Max)
	9X Media Graphics (Up to 64 Outputs)
	(2048x1536Max VGA)
	(1920x1200Max DVI)
Power:	1000~2000W 1U Redundant Power Supply
Dimensions:	6U Rack-mount Computer Chassis
	10.5" (H) x 19" (W) x 26.4" (D)
	(267 mm x 483 mm x 671 mm)
Weight:	66~75Lbs (30 kg)
Cooling:	4 x 90mm (51 CFM ea.) Center Mount

Input Specifications

Analog RGB Sources:

(640 x 480), (800 x 600), (1024 x 768), (1280 x 1024), (1600 x 1200), (1920 x 1080), (2048 x 1536), Custom modes

DVI-I Sources:

(640 x 480), (800 x 600), (1024 x 768), (1280 x 1024), (1600 x 1200), (1920 x 1080), (1920 x 1200), Custom modes

HDMI/YPrPb Sources:

1080p, 1080i, 720p, 567p, 480p and 480i
Component HD-DVI connector required on certain models (HDCP not supported)
**HDMI-DVI connector required for HDMI Input

Composite Sources:

PAL 576i 720x576, NTSC 480i 720x480

Audio Sources

RCA Monaural/Stereo

More information regarding input specification is contained within each 9X Media product manual located within the 9X Media software DVD.

Introduction

9X Media HD6400 Video Wall Controller

The HD6400 system is versatile and expandable PC and Video Wall Controlling system. This system is uniquely designed to fit many different applications that require the presentation of live data and video. Each system is built-to-order and offers many different types of live media inputs. Our 9X Media Video Wall Control software is designed to play the video from each device connected into the HD6400 within customizable windows. This Windows based control software makes the system easy to use and highly versatile. Users are able to place and control video content anywhere on the video wall in real-time!

This guide is designed to give the user step-by-step instructions on the setup and use of the HD6400 system. Areas covered by this guide include setting up the HD6400 hardware, installation of the drivers and software, as well as how to use the Video Wall Control software. For complete information of all advanced tools and features of this software you may find within the interactive help file located on your 9X Media software DVD.

All 9X Media products are customized to your needs. Depending on your systems configuration each system may differ from images shown.

Hardware Setup

Let us begin by setting up and connecting devices to your 9X Media video server. To start, check to make sure you have all cables and connectors as well as any devices that you will be connecting. From this point all display mounts should be properly installed and secured. You will find the installation process easiest when your cabling is installed prior to the mounting of your displays.
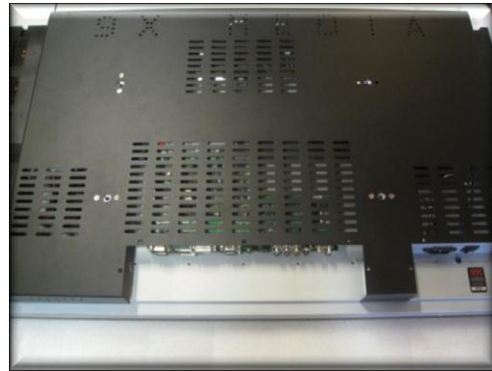

❖ Once you have all parts ready to be connected, you can begin by connecting and cabling your display(s). Connect your RGB or DVI cable into your 9X Media Slimline LCD series according to the picture below. Make note of both sets of RGB and DVI connectors, the lower panel is designated as the receiving inputs and the upper are outputs used in daisy-chain applications.

➢ *Note!*
   The input panel contains the only HDMI port, this will help identify the correct board.
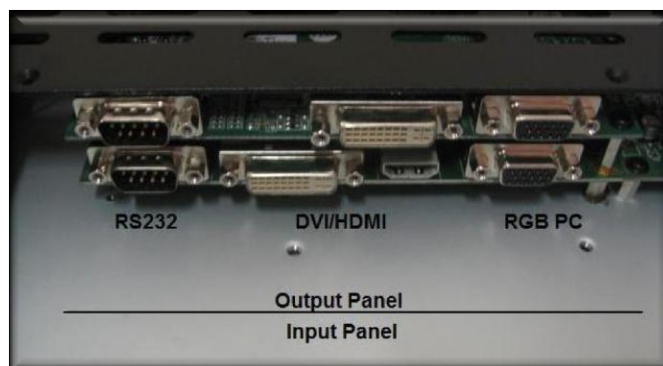
❖ Included with your displays will be a remote to access all of the features of the 9X Media Slimline LCD display(s). You may also access the menu, source, and power features by the side buttons located on the inner-right side of the display.
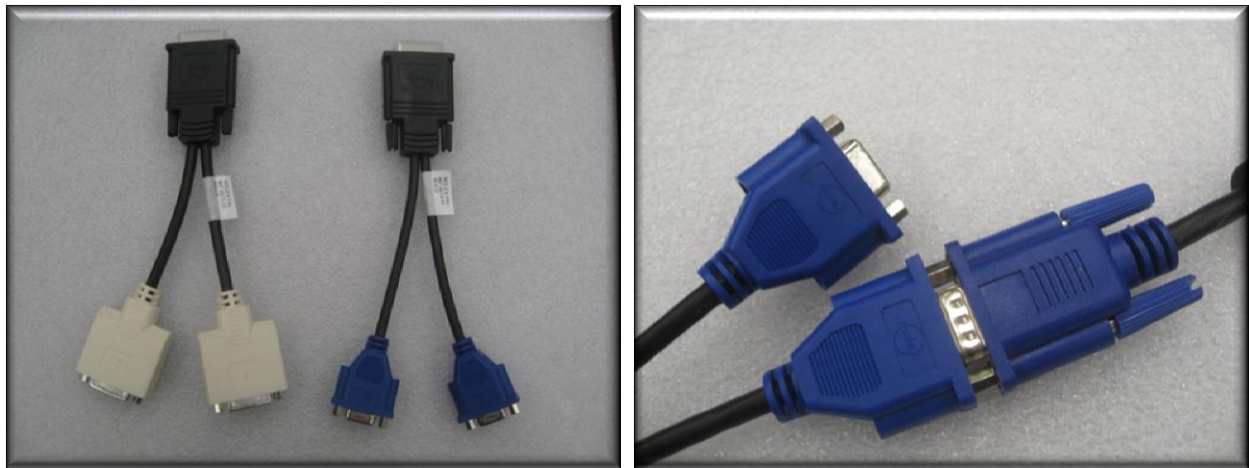

❖ Now connect your 9X Media Slimline LCD display(s) to the proper RGB or DVI connector that was provided with your 9X Media Video Wall Controller. Notice that the female ends of these connectors are labeled **1** and **2**; use these numbers to identify which is the primary and secondary output of each connector. For large groups of monitors these labels will go together in series, example;

Display #1 >**(1)**   Display #3 > **(1)**   Display #5 > **(1)**   Display #7 > **(1)**
Display #2 >**(2)**   Display #4 > **(2)**   Display #6 > **(2)**   Display #8 > **(2)**
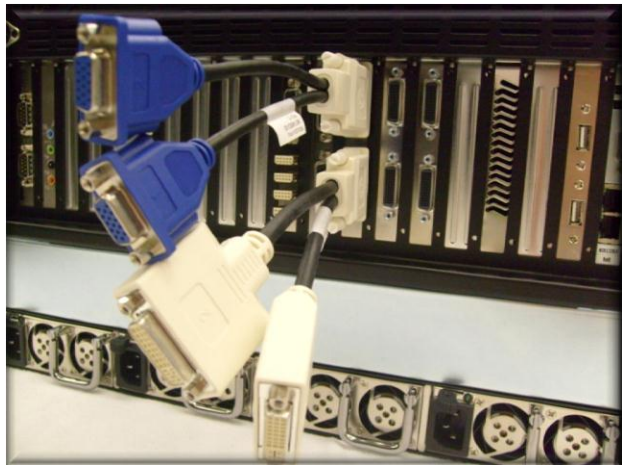
❖ Connect the Molex LFH 60-Pin adapter to the appropriate connection on the video card, displays #1 and #2 are shown in the picture above. Screen ordering will follow a top-bottom, left-right orientation. For further instructions on connecting your displays please consult the 9X I4 and 9X V4 product manuals.


❖ Connect the power as shown in the pictures above. The power requirements of your server may vary depending on the configuration, both types of power supplies are shown above. 9X Media uses high-output redundant power supplies. These power supplies are hot-swappable and can be adjusted for US domestic and international voltages ranging from 110~240V.

❖ Connect your LAN and USB devices. These devices will include your mouse and keyboard as well as your 9X Media/HASP software activation key. Note that the light on the activation key will turn red once it has been detected and installed. If your key does not turn red, this may indicate that no driver has been installed or it is not working properly.

➢ **Note!**
The onboard VGA graphics (shown) are disabled within the system BIOS by default. This VGA connection is used for a local display monitor which is covered by this guide in a later section.
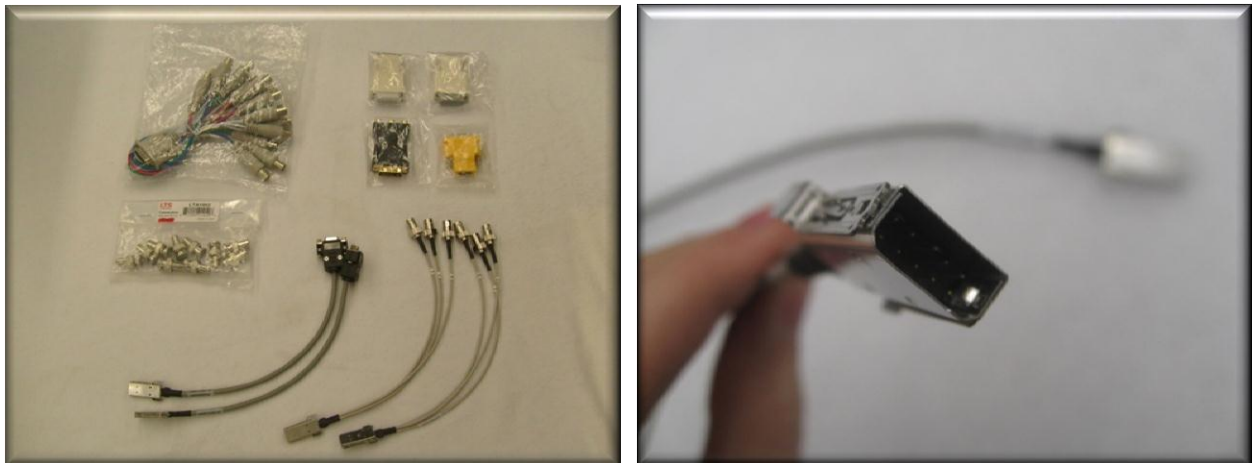
❖ Packaged with your 9X Media server are the adapters for the High-definition media inputs. There are many different types of these adapters. The M-RGB type adapter has a female VGA connector and the M-PrYPb video type adapter has (3) leads with female BNC connectors labeled 1, 2, and 3.
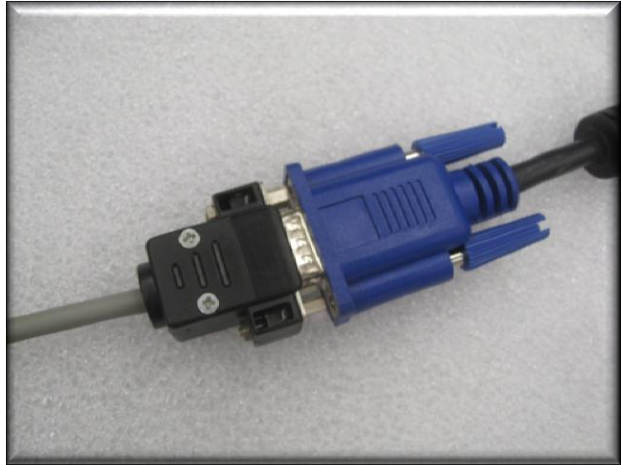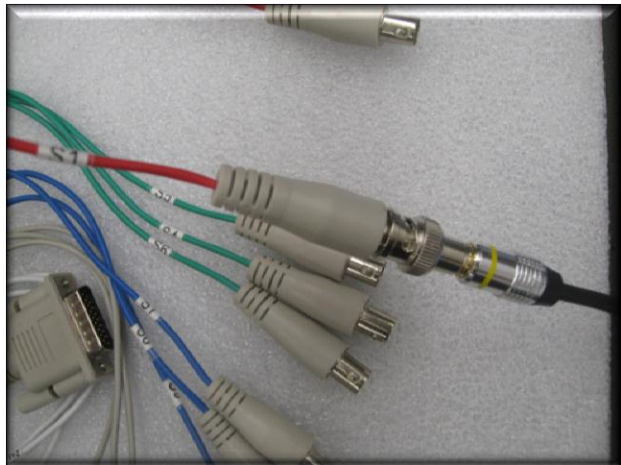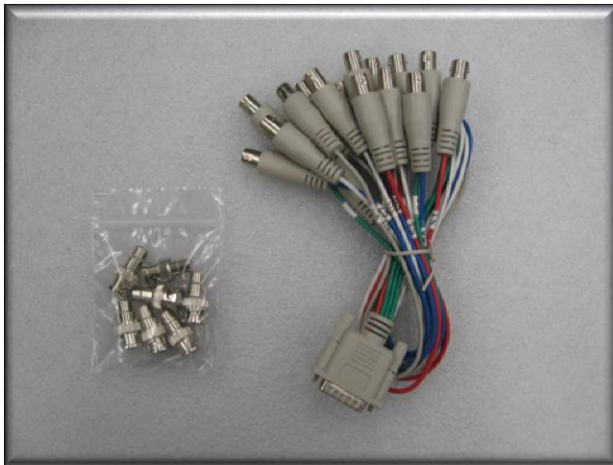
❖ To properly connect these sources, refer to the picture shown above to properly connect a component video cable and a VGA source. The Component video leads are labeled numerically and should be connected to the proper color lead, these leads are identified below.

Lead 1= Red
Lead 2= Green
Lead 3= Blue

❖ Composite video signals will need to use the BNC16 breakout cable shown above. This cable will be labeled from S1-S16, however only S1-S8 will be used for composite video, the remaining are for the use of S-Video signals. Composite video signals require no additional setup. Connect your BNC or RCA style cable into S1 of the breakout cable, from this point you may now open video window (1) under the 9X Composite 16 column of the 9X Video Wall Manager. To display S-Video signals requires the use of an additional adapter to divide the Luma and Chroma signals out to two of the BNC16 leads. Please refer to the 9X Connection Table for more information on connecting S-Video sources.
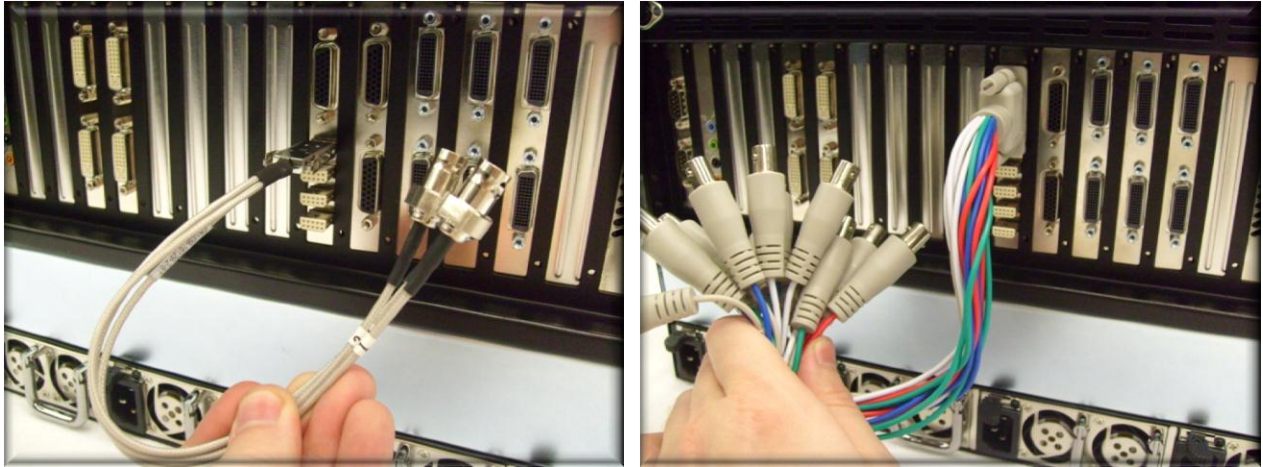
❖ Connect your input devices as shown above, make note of which devices are plugged into which physical input as this will identify which video window the device will be located on. The numerical labels that identify each device may also be changed within the software settings.

❖ Part of 9X Media's new product line, we have introduced a capture card for Digital High-Definition sources. This capture will utilize various adapters to support different capture formats. Because they are digitally supported captures they will require *no* setup within the Video Wall Control software. All display settings and formats will be automatically configured upon connection. The supported input types are listed on the Input Specification page. Using an unsupported adapter or converter may result in "No Signal" or failure to capture the signal properly.

9X Connecting to your Devices

❖ To connect to a DVD, TV Tuner, Blu-Ray, or any other device using component video as shown above, connect your PrYPb component cable into the "component video out" of your device. Many devices also have composite video out on them as well which may also be used.

❖ Connecting an RGB device may differ depending on the device, to connect a standard laptop follow the picture above. In order to get a PC or laptop to output through this connection you need to tell it to do so. Depending on your PC or laptop you will need to go to the display settings and enable your secondary monitor as shown below (which is going into the 9X Media video server). No output from your device will result in "NO SIGNAL" being displayed.
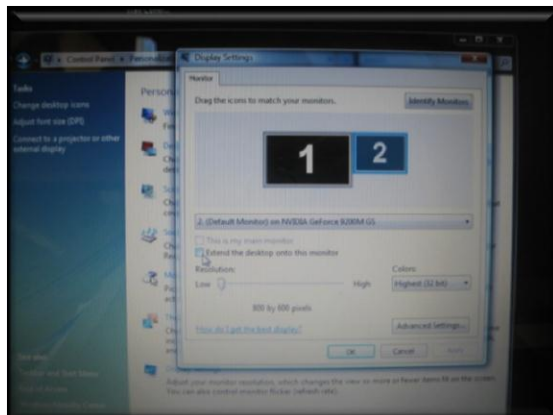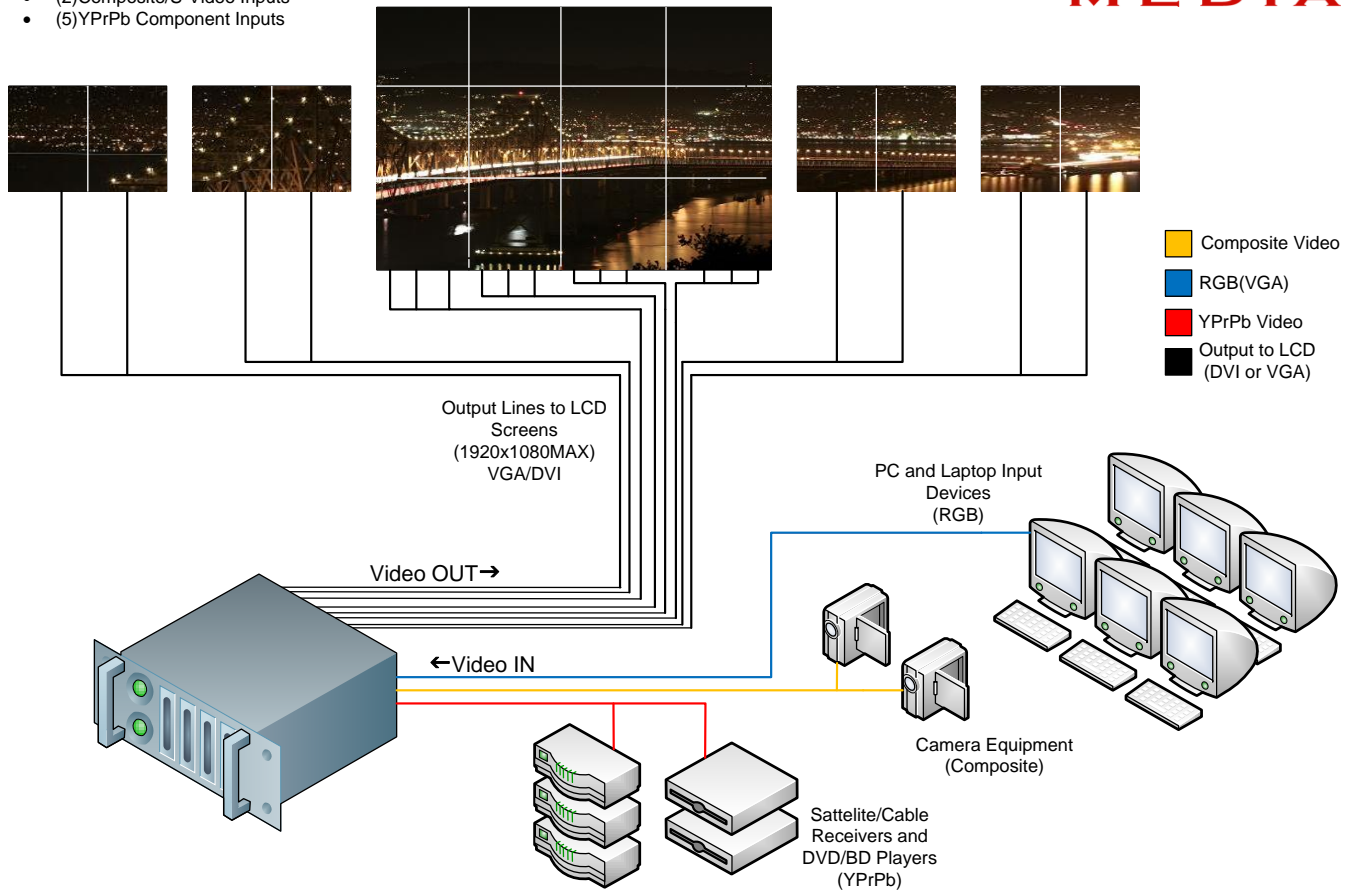
EXAMPLE SETUP

9X HD6400 Video Wall Controller
Configured For:
- (20)High-Def Output
- (6)RGB
- (2)Composite/S-Video Inputs
- (5)YPrPb Component Inputs

Composite Video

RGB(VGA)

YPrPb Video

Output to LCD
(DVI or VGA)

Output Lines to LCD
Screens
(1920x1080MAX)
VGA/DVI

PC and Laptop Input
Devices
(RGB)

Video OUT→

←Video IN

Camera Equipment
(Composite)

Sattelite/Cable
Receivers and
DVD/BD Players
(YPrPb)

❖ Shown above is an example of a typical video wall controller setup. Here you will notice each LCD will have a dedicated line coming from the video controller, the same also applies to inputs coming into the controller. The image span across all displays will be one single unified desktop that may be used to display all data and video devices connected into the HD6400 system.

➢ *Note!*
  This is an example setup of a Video Wall and Controller installation, actual installations may vary depending on intended application and functionality of each system.

Install Video Card Drivers

These steps will guide you through the installation of the 9X Media video card drivers and Input card drivers. All 9X Media software & drivers are pre-installed for proper hardware testing. These drivers should not be installed when you receive/install your system unless you are performing maintenance or repair on the software or applications. If you have restored your operating system to its original state you will however need to install this software before it will be functional once again.

1. To begin, you will start from your windows desktop screen and then you will need to either insert the 9X Media Video Wall Software DVD or navigate to the location of your saved drivers.
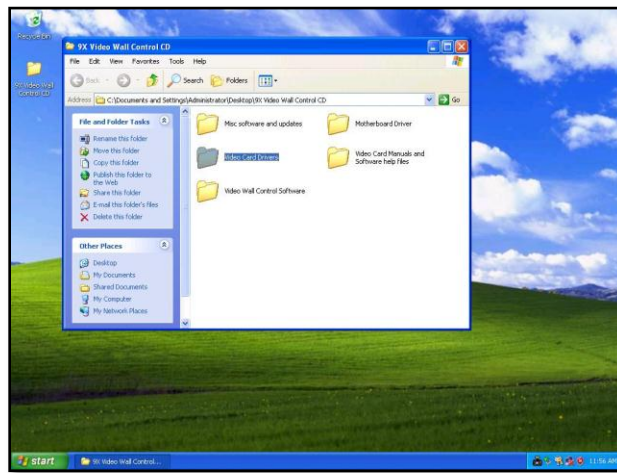
2. Open the "Video card drivers" folder and locate the file "install.exe" this will launch the installation and you will be prompted with a 9X Media Drivers Install screen.
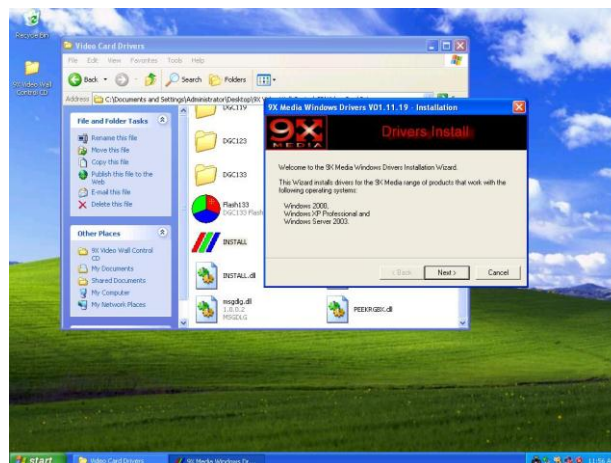
3. The next option you will see are a series of checked boxes that represent the 9X Media hardware that resides in your machine, select or de-select these boxes to choose which drivers you will be installing. If you are installing these for the first time, make sure that every box is selected.

4. Now you will be asked to set your number of displays and their configuration. If you are performing maintenance or only have (1) display readily available the user must be aware that upon successful installation and reboot the Windows Desktop will be configured for the selected array.


5. Next you will choose the resolution, refresh rate, and color or your displays. These values should remain on the defaults during this part of the installation. You will be available to change these values once they have been installed.

   ➢ *Note!*
     The color depth must be set at its default setting of High Color (16-Bit). If set to True Color or Highest (32-Bit) you will adversely affect the video capture quality and speed.

6. After you click next on the previous page you will be prompted with a summary of the installation, verify all information is correct and then proceed. You will then see a system message stating the driver is not digitally signed by Windows XP, this is standard and not a sign of problem, please select continue and proceed with the install. You will see one dialog box per 9X Media video/input card that is inside the system.
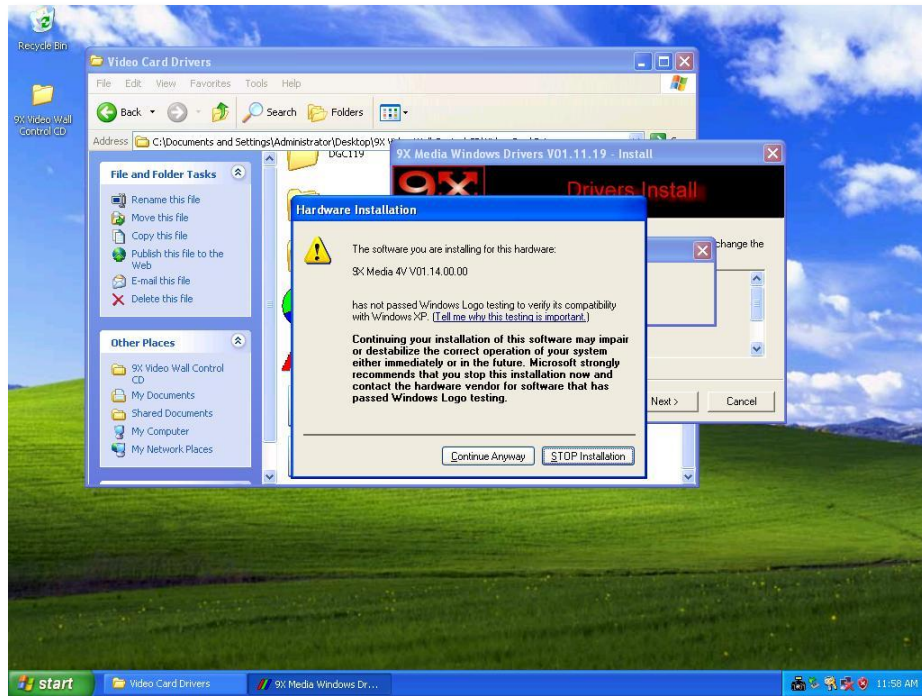

7. After this process finishes the installation is now complete, you will be asked to restart your system to finish.

Configure Your Display Settings

Once you have installed the drivers for your 9X Media output device, you may now change the output resolution as well as make changes to your screen configuration.

❖ Begin by navigating to the display properties, which may be done through the control panel or the desktop.
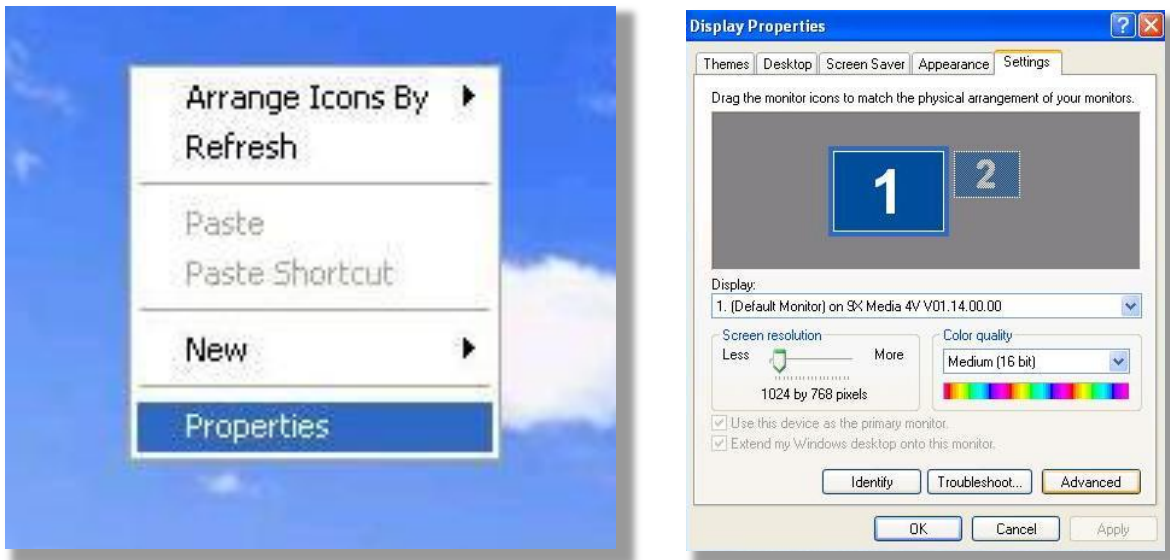
❖ Normally in Windows all displays and resolutions may be configured directly from the "Display Properties" tab, but this will not be used with this system. To make changes you MUST to go to the "Advanced" button and from there you will select the "TWIN" tab on the top of the page.

❖ This page will be the only place for you to make any display and configuration changes. You may start by selecting the resolution of your displays (individual monitor resolutions are not supported). The number of screens and configuration may also be set, changing these settings will require a restart to apply any changes.
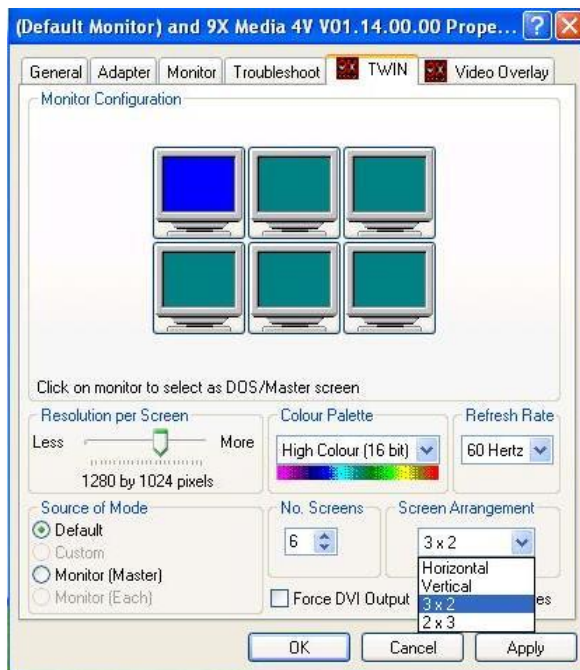
Install Video Wall Control Software

This guide will go over how to install the 9X Media video wall control application for the 9X Media video servers and remote clients. All 9X Media software & drivers are pre-installed for proper hardware testing. These drivers should not be installed when you receive/install your system unless you are performing maintenance or repair on the software or applications. If you have restored your operating system to its original state you will however need to install this software before it will be functional once again.

1. To begin, you will start from your windows desktop screen and then you will need to either insert the 9X Media Video Wall Software DVD or navigate to the location of your saved software.
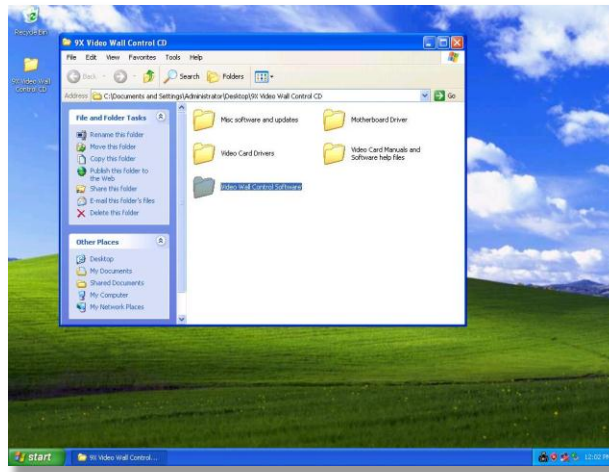
2. Open the folder "Video Wall Control Software" then locate the file "install.exe" and launch the installer application.

3. The next menu will be to direct where the software will be installed and to name its shortcut header entry in the Windows program list. It is recommended to leave this value default. This will ensure that all files are stored in the appropriate location.

4. You will now have the option of installing the server application which is needed to act as a host for all media inputs, or a client. If you are installing this software on the host 9X Media server you will need to leave both boxes selected. If you are installing this software on a remote computer that will be used to access or control the video wall you will only install the client application and not the server.

5. This page will be a series of checked boxes next to a wide range of 9X Media input cards. This selection is all checked by default but for better performance of the software it is recommended that only the cards that are going to be used be checked. Check the cards you wish to install into the application and select the next button.

6. After you select your appropriate 9X Media input cards you will see a prompt with the installation summary, proceed by clicking the next button.

7. Once the files have been installed you will now see a series of options to install the advanced features of the 9X Media video wall software. To do this you must have the HASP license key that was packaged with your 9X Media server installed into one of the available USB ports in the system. These advanced features include features such as the ability to save input selections and to save and open video wall layout files. You may see an error message such as the one below, this however is normal and will complete successfully.

8. Once you have completed this step the software is now installed but will not be ready for use until you have successfully rebooted your system. The software will prompt you for a restart, click next to proceed.

## Using the 9X Media Video Wall Control Software

This section will demonstrate how to use the video wall control software and configure your video wall to allow incoming connections from various input devices.
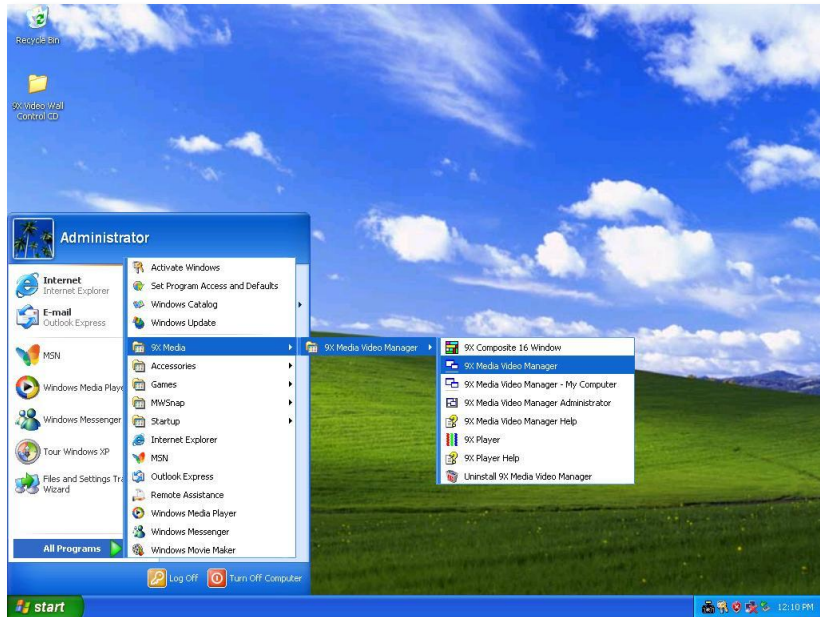
- ❖ Begin by opening the "9X Media Video Manager" from the "9X Media" start menu folder.

- ❖ Once the program is opened you will notice a blank grey screen with a column on the left with "My Computer". This will connect you to the local machine's video I/O control screen which will be the base of which to set up your video wall.
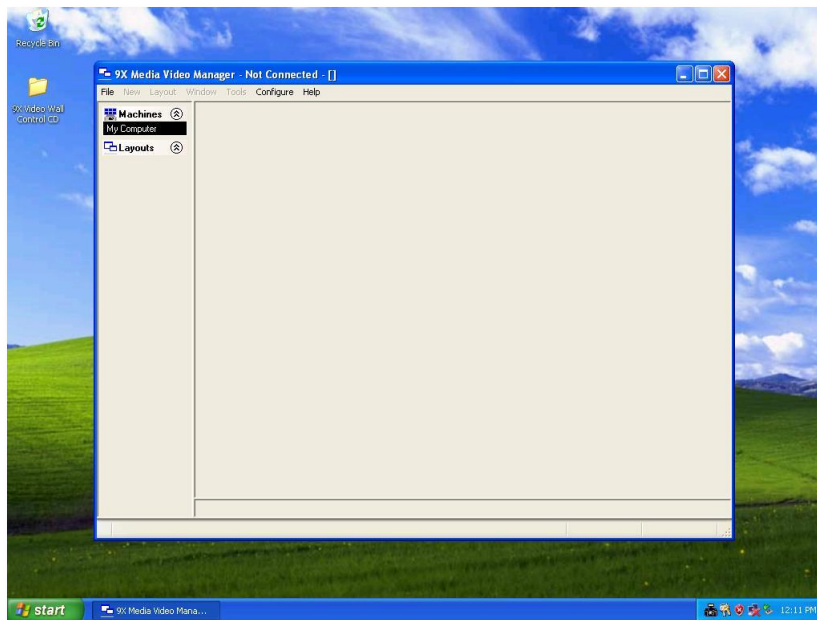
❖ This is the main control screen, this screen represents the entire collection of displays into one screen so that you may monitor what is being played and where it is located. From here you will begin to configure your video inputs.
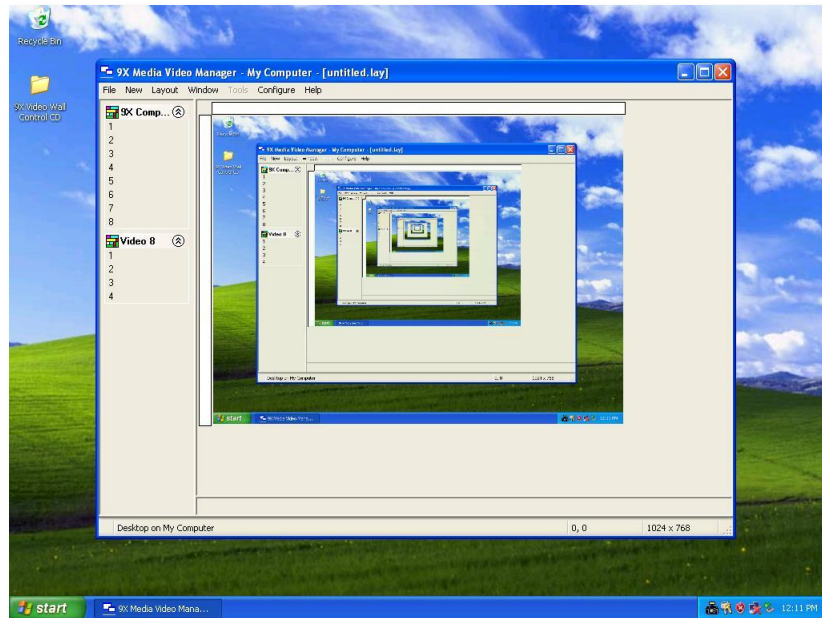
Component Video Setup

❖ To begin, set up a video input window to allow an incoming component video connection by a DVD player or other media source. Double-click on label (1) to open a new window. In order to see any display you must configure the right window for your incoming connection. Example, you have a DVD media source connected to the first High-definition input so you will open up (1) under "Video 8". After you do this, a new window will appear which may or may not have a video already playing. To configure, select "Window" from the file menu and then "Input Settings".
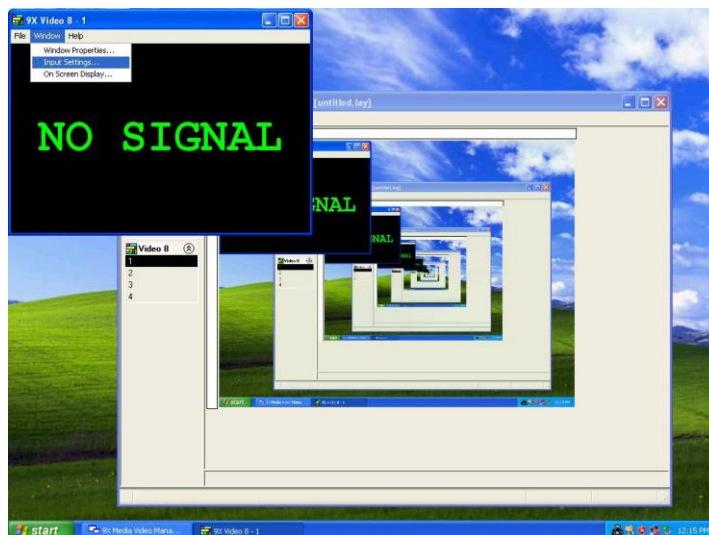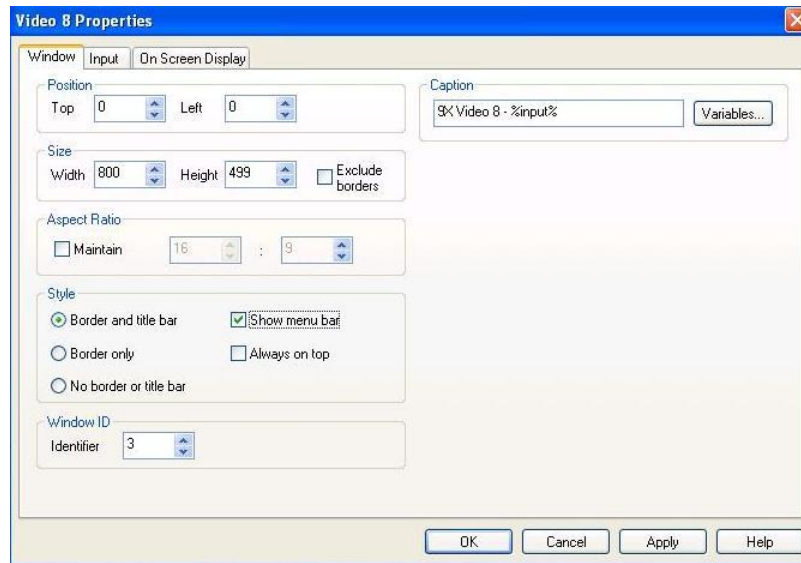
❖ Once the Input Settings window is displayed you will see various settings. To Set up your component video DVD player you will first select "YPrPb" for the Input Type. Below it you will be able to change the input label if you need to quickly switch inputs without opening new windows. Last you will select the Video Standard. By default this setting is 1080i – 60Hz (you will also be able to receive 1080p signals under this setting). Once you are done apply these changes and click the OK button.

❖ At this point you should now be able to see your media source on the newly opened video window. Component Video sources may only be shown once, multiples are not allowed for this type of media.

❖ You can now make changes to the window framing and position. To do this open any active video window and select "Window" from the file menu and then "Window Settings". This window will allow you to change the size, position, border type, and rules of your window.


VGA Window Setup

❖ To setup an RGB window is very similar to the others, simply go to the "Input Settings" window and you will now select RGB for the Input Type. Next you will choose the resolution that you are going to capture, the resolution of the output device must be one of the following…

(800x600) , (1024x768) , (1280x720) , (1280x1024) , 60HZ refresh rate
**The resolutions of both the output device and the capture settings must match.**
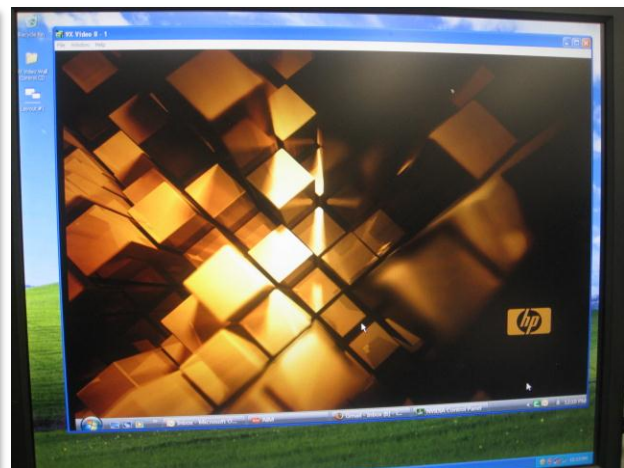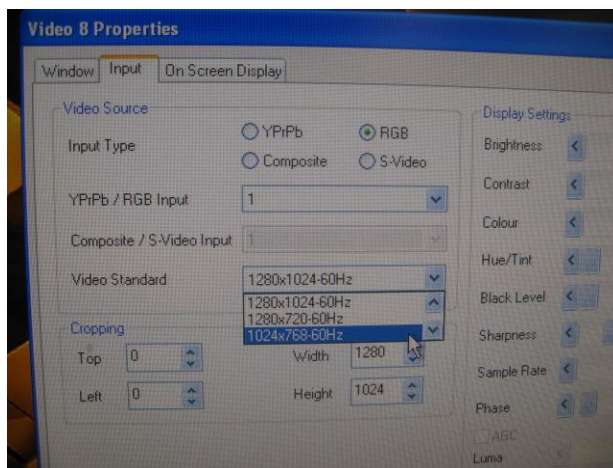
❖ You may or may not notice a small gap on the left or right side of the capture window, this result seems dependant on the video card or output device's signal. To remedy this you will need to crop out the negative space. The crop settings are directly below the video source section of the Input Settings window.

❖ Once the window has been properly adjusted you are now ready to save your settings and arrange your RGB captures on your video wall. RGB windows may only be shown once per input, multiples of this media type are not supported by this board.
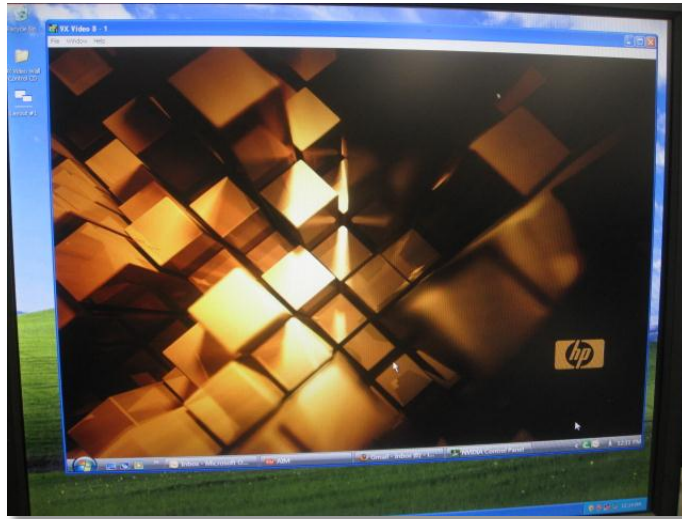

Composite Video Setup

❖ To setup a composite video source you will need to connect your input onto the BNC16 cable that attaches to the top 25-Pin D-Sub connector of your 9X Media HQ or 9X Media SQ video input card. Only leads that are marked as S1-S8 will be used for composite video.

❖ To configure these windows, you will just need to select the correct window depending on which input lead your video is connected to. Once open you may leave all settings at default, or you may select a different video standard such as PAL.
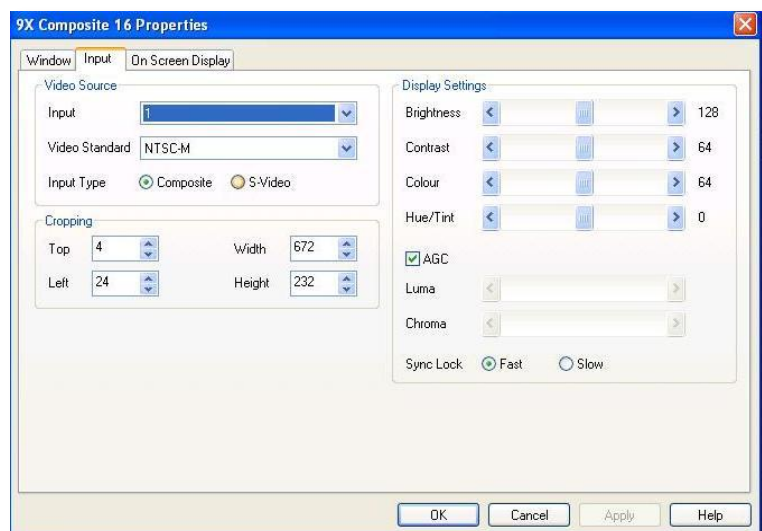
Saving your Video Wall Layout

❖ To save your current settings and layout to a file, navigate to the File Menu on the main 9X Media Video Manager window and select "File" then scroll down to "Save As". Define a name for the file and proceed to save the layout file to a location of your choosing. This layout file may now be called upon to restore all saved video input windows.
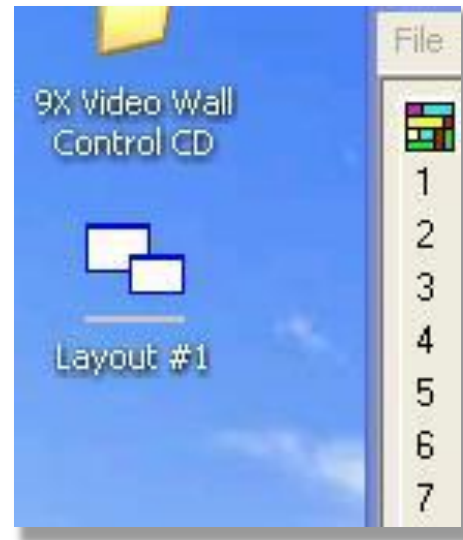

Remotely Configure Video Wall

❖ One of the added features of the 9X Video Wall Control Software is the ability to administer video wall applications and windows by using a remote desktop or laptop PC. Using this feature you will be able to control all parts of the 9X Video Wall just like you would normally control them directly from the video wall controller. There are important parts to note when controlling the video wall via remote PC;

   o *You will not be able to control functions of Windows XP such as turning the system on/off.*
   o *This feature is only available to remote machines that reside on the same domain or network.*
   o *The Video Wall Software may be installed on as many remote machines as desired, but only (6) machines may take control at the same time.*
   o *To use this feature you must have an activated copy of the 9X Media Video Manager, If you are using the USB Key for activation please make sure that it is inserted and working properly.*

1. On the primary video wall controller or "Server", navigate to the START button and select the "Run" tab. Once in the "Run" dialog box you will then type in the command "CMD". Click OK to proceed to the next window.

2. The next step is to find the IP Address of the Controller, once the new window has opened you will type in the following command at the end of the existing line. Type in "ipconfig /all" exactly as shown and press Enter. You will now have access to the Controllers networking information including IP Address, Gateway, MAC Address, and Subnet Mask.
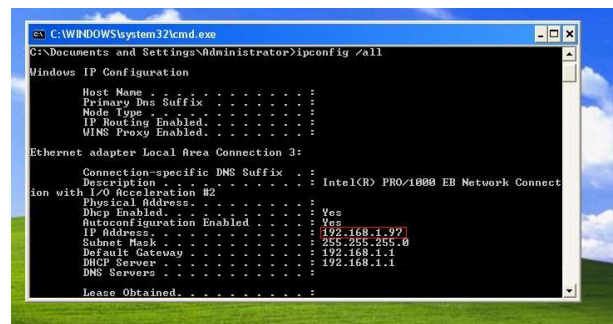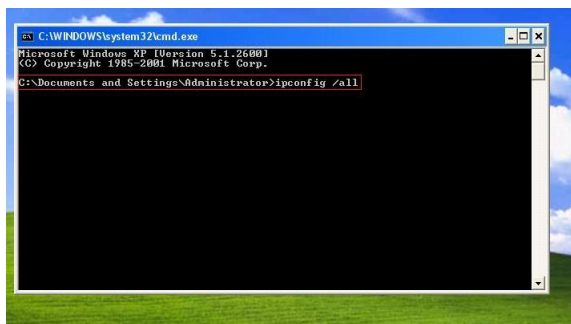
3. This step is optional to the user. To disable authentication for users that log-in to the Controller follow the steps and example below. In the 9X Media folder located in the programs or START menu, run the "9X Video Manager Administrator" program. This program will give you the option to disable the authentication prompting for a valid Username and Password for an Administrator of the Controller.

4. For this part you will now be working from your Remote PC. For assistance installing the software on your remote machines please see the section on "Video Wall Software Installation". Once installed, open the "9X Media Video Manager" application as you normally would on the Controller itself. Once this is open, you will now go to the File Menu and select "Connect" from the drop-down menu. Type the IP Address of the Controller that you had gotten from Step#2 into the entry box and press Enter.
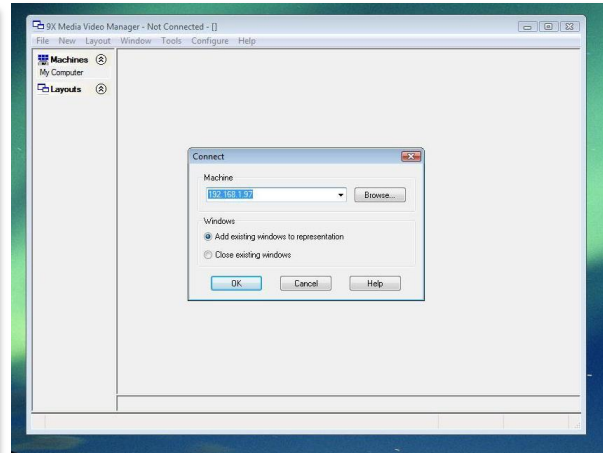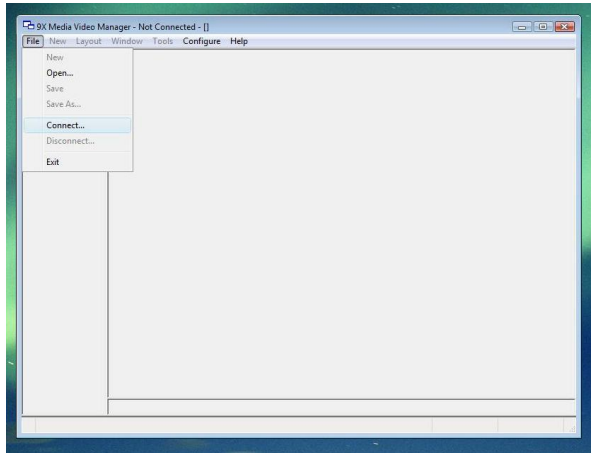

Run an application using the 9X Video Manager

❖ This feature will allow you to use the 9X Media Video Manager to open up a Windows program such as Quicktime or PowerPoint to display information or video files. This is a useful tool as it will allow you to assign window properties such as exact location and size and be saved as part of the video wall layout. This will allow you to open up common programs such as Internet Explorer by using the Save Layout feature.

To do this you only need to follow two basic steps, selecting the program's .exe file, and specifying the file it will open. To start simply navigate to the File Menu and select "Run Application" from the New menu.

Once the Run Application window is open you will be given three lines to provide input in. The first box will be the "Browse" line in which you will find the application to be used. In this case Windows Media Player will be used, so you must then browse for the appropriate .exe file used to launch the program. The second line will be the command input specifying the located of the video file to be used or opened.

- Note that most .EXE files will be located in the root folder for the program. In most cases this can be found in the "C:/Program Files" folder.
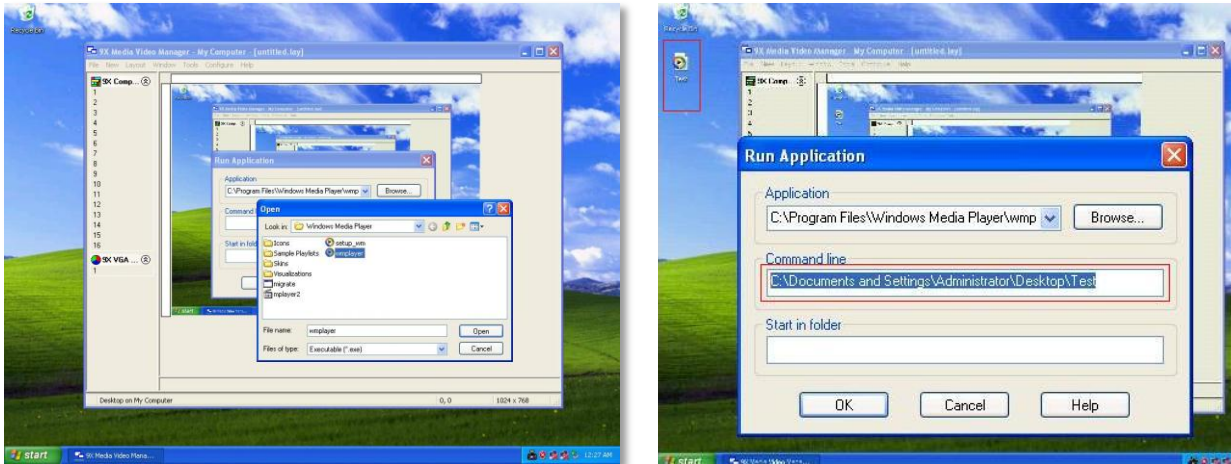
Configure and Monitor your Video Wall Software

❖ To make changes to your software such as how the background images are displayed and the text of the messages you see can be changed through the "Configure" tab located in the File Menu. You can also manually change the order of your displays, or add screen labels and borders to the Video Wall Manager.

❖ When the 9X Media Video Wall Manager is installed on an active 9X Media server it will be running a series of server applications depending on the input cards that were selected during the installation. These applications are critical in the overall function of the video server, if any of the server applications stop running the video feeds will not be able to display. If your system is running properly these actions are all running normally, however this should be checked first if you experience any problems. This window can be accessed by selecting "Configure" from the File Menu and then "Server Applications".
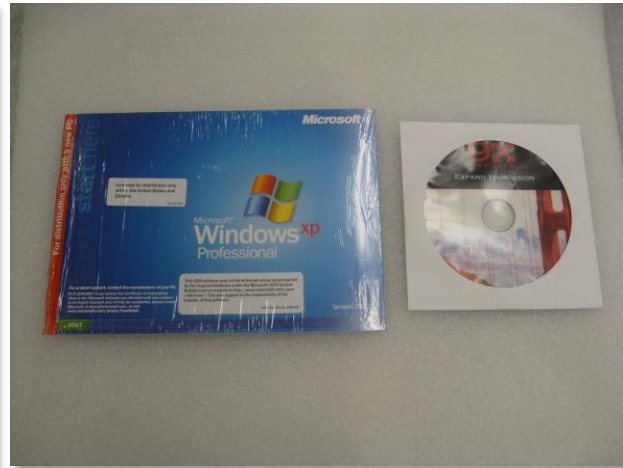
Troubleshooting and Repair

If you are experiencing problems with your 9X Media server you should consult this section as well as the troubleshooting section of the product manuals. There may be useful information contained that may help you with basic problems such as flickering, which may be resolved by powering off the machine for a short time and restarting. For other problems please contact 9X Media Technical Support.

9X Media Software

❖ Packaged with your 9X Media video server will be your copy of the installed Operating System as well as a 9X Media DVD containing all of the software and drivers that are used in the system. Use this DVD to install the 9X Video Wall Control for remote client access, and to repair any of the installations on your machine if needed.


Installing Your Motherboard/SBC Drivers

❖ Some troubleshooting may require you to install or re-install your motherboard drivers; these drivers are located on the 9X Media Video Wall Software DVD.

If you are performing a restoration of the operating system you must install the Intel Chipset Driver first. To do this you must navigate to the "Motherboard Driver" folder of your 9X Media DVD and run the "Chipset Driver" program.
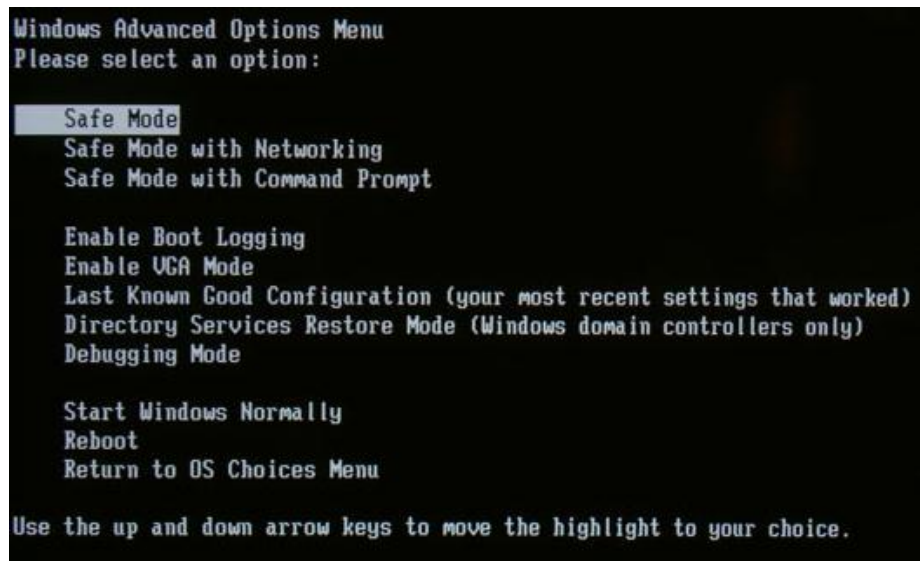
❖ Next you will install the Networking drivers for your motherboard, open the "Network Driver" folder and run the program "PRO2KXP_13_1_2.exe". This will install the dual gigabit LAN interface for your motherboard.
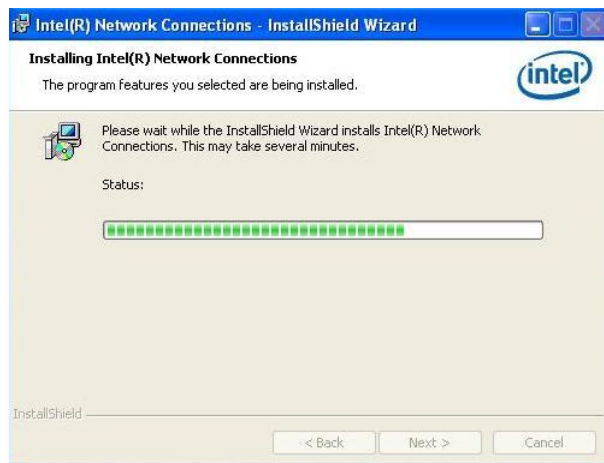
Install System Drivers using Safe Mode

Restoring your system drivers through safe mode is another troubleshooting technique that may resolve such problems as inability to access the Video Wall Manager program, errors during video playback, system instability, and replacement or addition of video hardware.

To Begin, reboot the system and after the BIOS screen press and hold F8 on the keyboard. Make sure this is done before the Windows XP boot screen. If this step is done incorrectly, do not restart the machine using the reset button. Restart the machine through the Windows Shut Down menu and try again.

```
Windows Advanced Options Menu
Please select an option:

    Safe Mode
    Safe Mode with Networking
    Safe Mode with Command Prompt

    Enable Boot Logging
    Enable VGA Mode
    Last Known Good Configuration (your most recent settings that worked)
    Directory Services Restore Mode (Windows domain controllers only)
    Debugging Mode

    Start Windows Normally
    Reboot
    Return to OS Choices Menu

Use the up and down arrow keys to move the highlight to your choice.
```

Here you will see the Windows advanced boot options menu. Some cases may be resolved by using the "Last Known Good Configuration" selection. For most cases the "Safe Mode" setting should be used. Once Windows XP has booted into safe mode you will now be able to proceed with the installation of the necessary 9X Media video device drivers.

Install or Remove SIP cables

❖ Inside select 9X Media Video Wall Controllers are thin white ribbon cables which carry the video data from the input devices and share it between the other I/O cards to output that video onto your displays. These cables are very fragile and must be handled with care when removed or installed. Below is a picture of what these SIP cables look like and how they are arranged inside of your server.


❖ These cables may come loose during the process of shipping, maintenance, or hardware installation which may cause side effects such as noise or flicker to appear on the video capture windows. Applying proper pressure to the square connector pads on these SIP cables may help the connection so that no data is lost causing these side effects.

If one of these cables were to break or appear damaged this will cause the video wall to not work properly and in some cases render the video input ability unusable. Contact a 9X Media technician for replacement cables and follow the methods below for proper removal and installation.
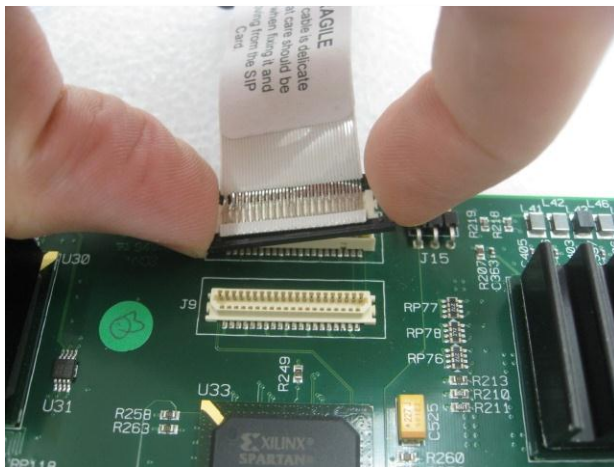

❖ To remove a SIP cable note the picture above, grasp the sides of the connecter at the base and never pull directly on the ribbon portion of this cable. Pinch the sides and pull the connector off of the base. Take your new or replacement cable and attach it as shown on the next page.
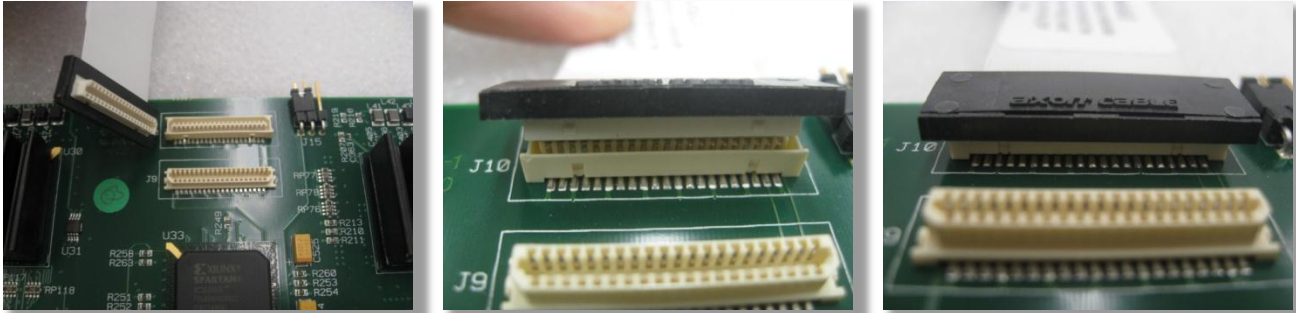
❖ Ensure that all cables are snapped firmly in place; cables that are not firmly connected may result in loss of video data which may be seen in the form of video flickering.
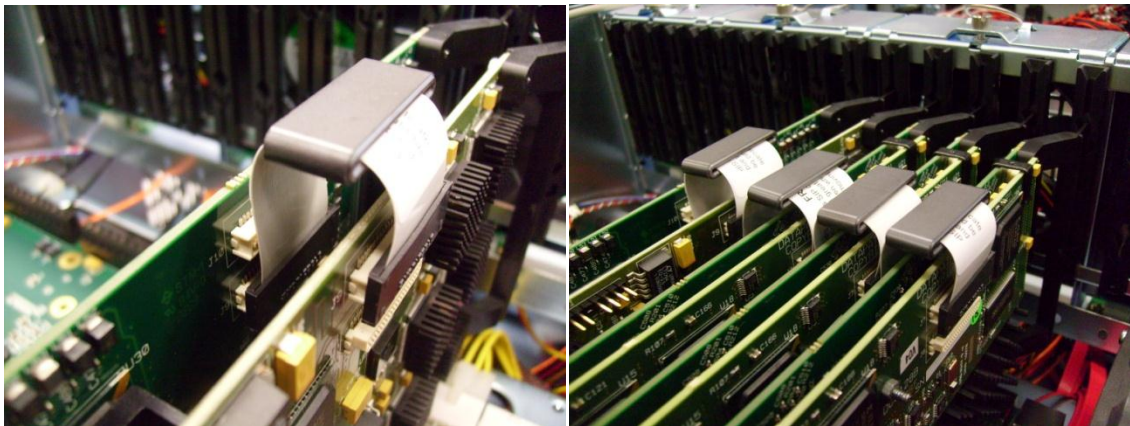
❖ Shown Above is an example of what the inside of your HD6400 system should look like with each graphics card interconnected. Each PC card should be properly aligned inside the slot guides to insure that no card should come into contact with another as well as to ensure no card should bend when inserting or removing connectors.

❖ Not all 9X Media graphics and capture cards require the use of SIP cables. Cards that do not require these interconnections can be installed in any available slot of the proper type.
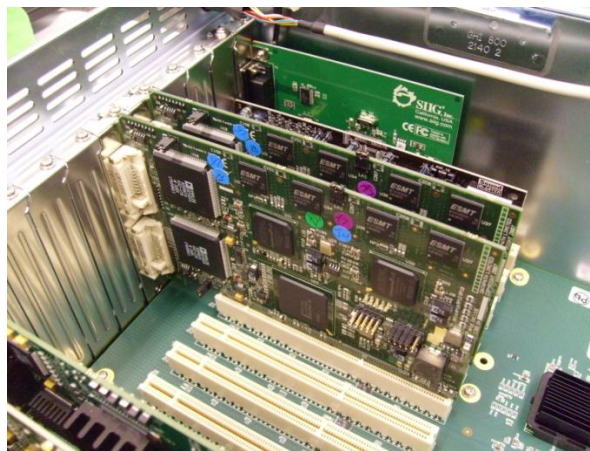
Installing retention bracket

Once all modifications and maintenance has been completed the retention bracket should always be in place to support the PC cards within their slots. Follow the instructions below to install the bracket.

Begin by inserting the retaining clip onto the support bar as shown. The clips should be attached with the larger size holes face-up. This will position the screws upwards so they will not come into contact with the PC boards. Once the correct amounts of clips are in place loosely fasten them so the screws will not fall into the chassis.

Arrange the clips above the PC boards so that the outward portions of the clips are pointing towards the rear of the boards. Once everything is in place securely tighten the screws and check to make sure everything is safely held down in place. Do not over tighten screws! Over tightening may break the retaining clip or result in too much pressure applied to the PC board.
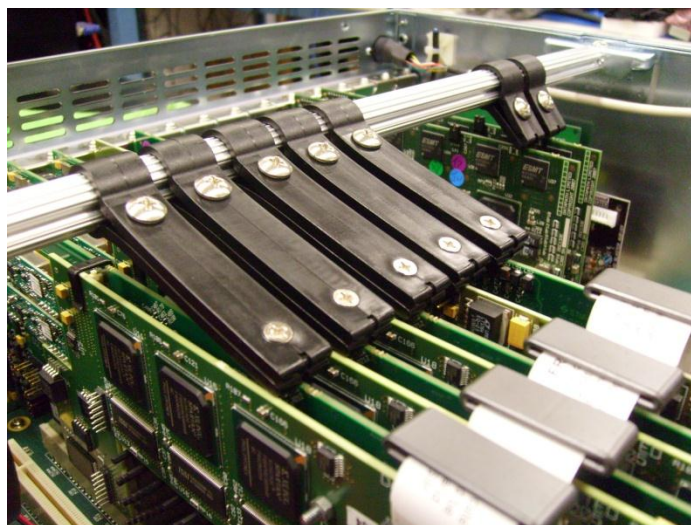
Technical Support

For all other Technical Support issues send an email to technicalsupport@9xmedia.com with as much information about your system as possible. To enable a swift response we need to know the following details:

- Application Software
- 9X Media Hardware / Software
- The exact nature of the problem - and please be as specific as possible.

Please quote version and revision numbers of hardware and software in use wherever possible.

U.S. Headquarters

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